



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,681	11/12/2003	Filippo Oneda	1340-018	8308
47888	7590	06/29/2006	EXAMINER	
HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			MCLOUD, RENATA D	
		ART UNIT	PAPER NUMBER	
			2837	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/706,681	ONEDA, FILIPPO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Renata McCloud	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 November 2003.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-13 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 12 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>09/16/05</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### *Specification*

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### *Arrangement of the Specification*

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the microcontroller, the cylinder,

Art Unit: 2837

rotor, sensor means, sensor derives, driver, phases, first encoding device, second encoding device, motor shaft, positions attached to the circumference; set of sensors, asynchronous serial interface, output, means for displaying, central controller, the eyes, the needles, friction points, the reel must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the microcontroller, the cylinder, rotor, sensor means, sensor derives, driver, phases, first encoding device, second encoding device, motor shaft, positions attached to the circumference; set of sensors, asynchronous serial interface, output, means for displaying, central controller, the eyes, the needles, friction points, the reel as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the

drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### *Claim Objections*

4. Claims 1-3,6-8,10,13 are objected to because of the following informalities:

Claim 1: the limitations "the delivery", "the rotating speed" "the currents" "the phases" have not been previously positively recited.

Claim 2: the limitation "the shaft", and "the correct winding" have not been previously positively recited.

Claim 3: the limitations "the presence", "the entrance", "the exit", "the signal" have not been previously positively recited.

Art Unit: 2837

Claim 6: the limitations "the current", "the input frequency", the output frequency" have not been previously positively recited.

Claim 7: the limitation "the logic signals" has not been previously positively recited.

Claim 8: the limitation " the remote signaling has not been previously positively recited.

Claim 10: the limitation "the cylinder" has not been previously positively recited.

Claim 13: the limitation "the reel" has not been previously positively recited.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim 7: the limitation "may be:" is indefinite.

Claim 9: the limitation "each electronic device" is indefinite. It seems as if there is more than one electronic device, when only one has been claimed in claim 1.

Claim 11 recites the limitation "the device", "the error", the deliver point". There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the central controller" , "the reknitting operations", "the eyes", "and the needles". There is insufficient antecedent basis for these limitations in the claim.

Claim 12: the limitation "ease" is indefinite.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1,2,9,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaeger et al (U.S.5166582).

**Claim 1:** Jaeger et al teach an electronic device for delivering yarn able to regulate delivery of yarn by varying the speed of a motor (22) according to an adjustable scale factor with respect to the speed of the textile machine (15; col. 3:33-40, abstract), the device is associated with a yarn winding wheel for delivering a thread to the machine (col. 5:17-29), the device including the motor (22) and a controller (39-41,44,49) having a microcontroller to control the speed of the motor and the current to the motor and maintains the delivery speed of the thread synchronous with the speed of the textile machine (col.6:18-28,46-57)

**Claim 2:** the yarn winding wheel is on the motor shaft and shaped to wind yarn (col. 5:17-29).

**Claim 9:** the machine is able to deliver thread from a point in order to program a synchronism ratio, the ratio being reprogrammable when the machine is working (col. 8:55-9:14).

**Claim 12:** the synchronism command is deactivatable (col. 7:35-42, the machine stops)

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-4, 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger et al in view of Memminger et al (US 4706476).

**Claim 3:** Jaeger et al teach the limitations of claim 1. Referring to claim 3, they do not teach a pair of arms for checking the presence of thread and the entrance and exit of the wheel, the position of the arms detected by sensor means producing signals detected by the controller. Memminger et al teach each a pair of arms for checking the presence of thread and the entrance and exit of the wheel, the position of the arms detected by sensor means producing signals detected by the controller (col.8:61-9:15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus taught by Jaeger et al to have feeler arms as taught by Memminger et al in order to sense the presence of yarn.

**Claim 4:** Jaeger et al teach the limitations of claim 1. Referring to claim 4, they do not teach a support and attachment plate, a support for a yarn guiding tube, a thread tightener, a stopper ; and a thread tightener ring. Memminger et al teach a support and attachment plate (Fig. 1:1), a support for a yarn guiding tube (fig.3: 45) , a thread tightener (fig. 1:39), a stopper (fig 4:42); and a thread tightener ring (fig. 1:28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus taught by

Jaeger al to have an attachment plate , a support for a yarn guiding tube, a thread tightener, a stopper ; and a thread tightener ring as taught by Memminger et al in order to control the feeding of the yarn.

**Claim 6:** Jaeger et al teach the controller of the motor controls a driver (29) that switches the phases of the motor and current delivered to the phases (col.5:41-45), the controller detecting an input frequency coming from a first encoding device engaged with the machine in order to compare the input frequency with the output frequency from a second encoding device (col. 8:55-9:13). Memminger et al teach the controller able to detect the sensor signals (col.8:61-9:15).

**Claim 7:** Jaeger et al teach the electronic control detects signal coming from a set of sensors, the control electronic control able to manage an asynchronous interface for communicating with a central controller in order to receive parameters (col. 6:29-57)

11. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger et al in view of Frye et al (US 5202610).

**Claim 5:** Jaeger et al teach the limitations of claim 1. Referring to claim 5, they teach a dc synchronous motor (abstract; col. 11:50-52). They do not teach a brushless motor. Frye et al teach a brushless dc motor (col. 1:57-59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus taught by Jaeger et al to use a brushless dc motor as taught by Frye et al in order to run the machine.

12. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger et al in view of Gendrot et al (US 3926511) and further in view of Damming et al (US 6874204).

**Claim 8:** Jaeger et al teach the limitations of claim 1. Referring to claim 8, they do not teach an output for the remote signaling of a stop and means for displaying the stop. Gendrot et al teach an output for the remote signaling of a stop (col 10:50-56). Dammig et al teach a display device displaying the conditions of the machine (Col. 8:47-51, 15:15-30; claim 18.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus taught by Jaeger et al to have a remote output as taught by Gendrot et al and a display as taught by Dammig et al in order to allow a user to operate the machine.

13. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger et al in view of Plath et al (US 5826446)

**Claim 10:** Jaeger et al the limitations of claim 1. Referring to claim 10, they do not teach the device is fixable in positions different with respect to positions of a cylinder. Plath et al teach a device is fixable in positions different with respect to positions of a cylinder (col. 1:51-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus taught by Jaeger et al to fix the device in positions as taught by Plath et al in order to save space.

#### ***Allowable Subject Matter***

14. Claims 11,13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

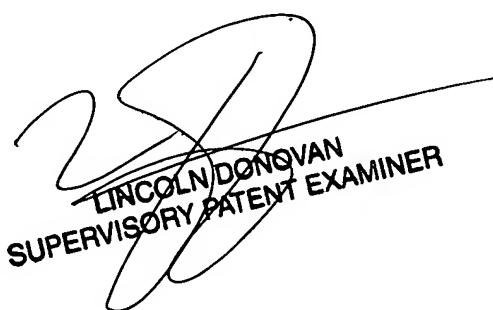
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (571) 272-2069. The examiner can normally be reached on Mon.- Fri. from 5:30 am - 2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Renata McCloud  
Examiner  
Art Unit 2837

rdm



LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "L.D." followed by a stylized surname. Below the signature, the words "SUPERVISORY PATENT EXAMINER" are printed in a smaller, sans-serif font, oriented diagonally.